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10/593,669	09/20/2006	Timo J. Heikkinen	879A.0113.U1(US)	2797
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EXAMINER				
NGO, CHUONG A				
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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

# Office Action Summary

**Application No.**

10/593,669

**Applicant(s)**

HEIKKINEN ET AL.

**Examiner**

CHUONG A. NGO

**Art Unit**

4133

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 20 September 2006.  
2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.  
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-24 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.  
6) ☒ Claim(s) 1-24 is/are rejected.  
7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.  
8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.  
10) ☒ The drawing(s) filed on 20 September 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☒ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)  
2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)  
3) ☒ Information Disclosure Statement(s) (PTO-8508)  
Paper No(s)/Mail Date 9/20/06  
4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_  
5) ☐ Notice of Informal Patent Application  
6) ☐ Other: \_\_\_\_\_

### **DETAILED ACTION**

1. This Office Action is in response to the Applicants' communication filed on 9/20/2006. In virtue of this communication, claims 1-24 are currently presented in the instant application.

### **Drawings**

2. The drawings submitted on 9/20/2006. These drawings are reviewed and accepted by the examiner.

### **Priority**

3. Receipt is acknowledged of paper submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

### **Information Disclosure Statement**

4. The information Disclosure Statement (IDS) Form PTO-1449, filed on 9/20/2006 is in compliance with the provisions of 37 CFR 1.97. Accordingly, the information disclosed therein was considered by the examiner.

### ***Claim Objections***

5. Claims 3 and 4 are objected to because of the following informalities: Should change "the data message to "a data message". Appropriate correction is required.

### ***Claim Rejections - 35 USC § 101***

6. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 22-24 are rejected under 35 U.S.C. 101 because the claim invention is direct to non-statutory subject matter of a signal.

***Claim Rejections - 35 USC § 112***

7. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

8. Claim 1 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claim 1 recites the limitation "the wireless communication devices and the communication device" on lines 5 and 8. There is insufficient antecedent basis for this limitation in the claim.

***Claim Rejections - 35 USC § 103***

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10. Claims 1-4, 6-11, 13-15, 17-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent Application Publication 2002011176A1 (hereinafter Roeder) in view of US Patent 5,742,668 (hereinafter Pepe).

Consider claim 1, the limitation "A method for managing, in a data communication network, communication addressed to a wireless communication device, in which the wireless communication devices communicating in the data communication network are equipped with at least one identifier (IMSI1-IMSI3)

and in which, the communication device is equipped with a control feature of a divert facility" is met by Roeder teaches in (paragraph [0030] In one aspect of operation, one or more mobile stations 108 communicate with wireless subsystem 102, and one or more telephones 110 communicate with telephone subsystem 106. A mobile station 108 may be associated with one or more telephones 110, such as when a subscriber using mobile station 108 also has a desk telephone 110 in an office);

the limitation "in order to control the divert facility concerning itself, and in which communication addressed to at least one communication device defined by a first identifier/identifiers (IMS1) is routed at least partly to at least one communication device defined by a second identifier/identifiers (IMS2)" is met by Roeder teaches in (paragraph [0030] By forwarding telephone calls to mobile station 108 when mobile station 108 registers with system 100 and unforwarding telephone 110 when mobile station 108 deregisters with system 100, system 100 reduces or eliminates the need for a subscriber to manually forward and unforward telephone 110, Roeder further teaches in paragraph [0036] telephone subsystem 106 includes at least one processor 118 operable to execute instructions stored in a memory 120, and packet subsystem 104 includes at least one processor 124 operable to execute instructions stored in a memory 126. In a particular embodiment, processor 118 may be operable to execute a CTI server software program to support CTI interface 116, and processor 124 may be operable to execute a corresponding CTI client software package to support CTI

interface 116. The CTI software may, for example, implement the European Computer Manufacturers Association (ECMA) standards ECMA-179 and ECMA-180 for Computer Supported Telecommunications Applications (CSTA). In a particular embodiment, processors 118 and 124 execute the CT CONNECT software package. Processors 118 and 124 may use the CTI interface, for example, to activate and deactivate call forwarding feature 112 or otherwise control telephone subsystem 106);

Although Roeder does not explicitly teach "characterized in that the control feature of the divert facility of the communication device defined by the first identifier/identifiers (IMS1) is remotely controlled using some second communication device". However, attention is directed to Pepe, which teaches (col. 3, lines 36-39, it is an object of the present invention to provide a mobile service subscriber the ability to remotely control the addressability, routing, accessibility, and delivery of messaging options).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the Roeder invention by employing the teaching as taught by Pepe to provide a network subscriber with the ability to remotely control the receipt and delivery of wireless and wire-line electronic text messages. The network operates as an interface between wireless and wire-line networks, the subscriber's message receipt and delivery options are maintained in a database which the subscriber may access by wireless or wire-line communications to update the options programmed in the database. Doing so

would merely involve using known technique (providing a network subscriber with the ability to remotely control the receipt and delivery electronic text messages) to improve similar device (internet work for personal communications) in the same way (network which provides a variety of electronic text delivery, receipt, and notification options).

Regarding claim 2, the claim limitation is taught by Pepe in (col. 4, lines 4-49, the PDA/PCI interface is illustrated in FIGS. 11-18. The PDA/PCI interface provides for the transfer of information between a remote wireless subscriber and the PCI). Therefore, the modification of Roeder and Pepe, as discussed above would have included the "characterized in that the second communication device is used to send a data message, on the basis of which the control feature of the divert facility is remote controlled".

Regarding claim 3, the claim limitation is taught by Pepe in (col. 6, lines 11-16, The PCI database 44 supports access to information authenticating the subscriber's identity and validating the types of services subscribed to, the subscriber's message delivery (incoming messages) options and origination (outgoing messages) options and voice (telephone call and voice mail) options). Therefore, the modification of Roeder and Pepe, as discussed above would have included the "characterized in that the data message includes authentication data, on the basis of which the validity of the remote controlling is decided".

Regarding claim 4, the limitation "characterized in that the data message includes identifier data (IMSI2, IMSI3), on the basis of which the divert facility is

activated/deactivated to one or more communication devices defined by the identifier data (IMSI2, IMSI3)" is met by Roeder teaches in (paragraph [0030] When mobile station 108 registers with wireless subsystem 102 and/or packet subsystem 104, telephone calls directed at telephone 110 may be forwarded to mobile station 108. For example, a call forwarding feature (CF) 112 in telephone subsystem 106 may be used to forward calls for the associated telephone 110 to mobile station 108. When mobile station 108 deregisters with wireless subsystem 102 and/or packet subsystem 104, system 100 may stop forwarding calls for telephone 110 to mobile station 108. By forwarding telephone calls to mobile station 108 when mobile station 108 registers with system 100 and unforwarding telephone 110 when mobile station 108 deregisters with system 100, system 100 reduces or eliminates the need for a subscriber to manually forward and unforward telephone 110. This also reduces or eliminates the likelihood that the subscriber using mobile station 108 will forget to activate or deactivate the call forwarding feature).

Regarding claim 6, the claim limitation is taught by Pepe in (col. 21, lines 53-63, Alternatively, if the subscriber's wireless terminal is not activated, e-mail messages may be automatically routed to alternate destinations as defined by the subscriber's profile. For example, the subscriber may not want to receive all telephone calls at a visiting location to avoid unnecessary interruptions and unwanted incoming call charges. The subscriber directs the PCI to send notification of phone calls to the pager and to route the call to voice mail. Once



notified, the user can determine from the phone number included in the pager notification whether to call the person directly, check voice mail, or ignore the call until a later time). Therefore, the modification of Roeder and Pepe, as discussed above would have included the "characterized in that the data message is transmitted to the communication device defined by the first identifier/identifiers (IMS1), which manages the divert facility concerning itself".

Regarding claim 7, the limitation "characterized in that, when the divert facility concerns the data communication addressed to the communication device, the data message is processed in a manner defined by the divert" is met by Roeder teaches in (paragraph [0054] Subscriber location register 270 stores subscriber management information for mobile stations 208. For example, subscriber location register 270 may store general subscriber management information downloaded from a public network when mobile station 208 roams into system 200. Subscriber location register 270 also stores each subscriber's extension number, direct dial number, and any other information that is specific to system 200).

Regarding claim 8 is drawn to the method used by the corresponding apparatus 1 and are rejected for the same reasons of obviousness used above.

Regarding claim 9 is drawn to the method used by the corresponding apparatus 2 and are rejected for the same reasons of obviousness used above.

Regarding claim 10 is drawn to the method used by the corresponding apparatus 3 and are rejected for the same reasons of obviousness used above.

Regarding claim 11 is drawn to the method used by the corresponding apparatus 4 and are rejected for the same reasons of obviousness used above.

Regarding claim 12 is drawn to the method used by the corresponding apparatus 5 and are rejected for the same reasons of obviousness used above.

Regarding claim 13 has limitations similar to those treated in the above rejection(s), and are met by the references as discussed claim 8 above.

Regarding claim 14 has limitations similar to those treated in the above rejection(s), and are met by the references as discussed claim 9 above.

Regarding claim 15 has limitations similar to those treated in the above rejection(s), and are met by the references as discussed claim 10 above.

Regarding claim 17 has limitations similar to those treated in the above rejection(s), and are met by the references as discussed claim 1 above.

Regarding claim 18 has limitations similar to those treated in the above rejection(s), and are met by the references as discussed claim 3 above.

Regarding claim 19 has limitations similar to those treated in the above rejection(s), and are met by the references as discussed claim 4 above.

Regarding claim 20 has limitations similar to those treated in the above rejection(s), and are met by the references as discussed claim 7 above.

Regarding claim 21 has limitations similar to those treated in the above rejection(s), and are met by the references as discussed claim 6 above.

Regarding claim 22 has limitations similar to those treated in the above rejection(s), and are met by the references as discussed claim 1 above.

Regarding claim 23 has limitations similar to those treated in the above rejection(s), and are met by the references as discussed claim 3 above.

Regarding claim 24 has limitations similar to those treated in the above rejection(s), and are met by the references as discussed claim 4 above.

11. Claims 5, 12, 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent Application Publication 20020111176A1 (hereinafter Roeder) in view of US Patent 5,742,668 (hereinafter Pepe) and further in view of US Patent Application Publication 20030091020A1 (hereinafter Bantukul).

Consider claim 5, Roeder and Pepe do not explicitly teach" characterized in that the identifier data (IMSI2) is identified from the sender data of a data message, to which the communication are routed in a set manner". However, attention is directed to Bantukul, which teaches in (Paragraph [0043] The routing indicator is used to indicate whether an off-loaded signaling message requires global title translation. In such an embodiment, the presence of a particular SMSC entity address in the data structure shown in Table 1 indicates that an SMS message destined for that SMSC entity is to be off-loaded from the core mobile SS7 signaling network. Additional checks may also be performed to ensure that a received SMS message destined for a provisioned SMSC entity address was originated by an authorized mobile subscriber. For instance, a mobile subscriber that has been ported out of a particular operator's network may retain the ability to originate an SMS message addressed to one of the operator's SMSC. An additional check of the originating mobile subscriber's mobile

identifier (e.g., IMSI, TMSI, MSISDN, etc.) may be used for unauthorized access screening).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the Roeder invention by employing the teaching as taught by Pepe to provide a system and method for routing a short message service message to a recipient without involving the mobile switching center serving the mobile subscriber who originated the SMS message. Doing so would merely involve using known technique (reduce the amount of SMS traffic in the core signaling system) to improve similar device (systems for routing short message service messages in a wireless communications network) in the same way (release communication channel resources used in the transmission of an SMS message).

Regarding claim 12 is drawn to the method used by the corresponding apparatus 5 and are rejected for the same reasons of obviousness used above.

Regarding claim 16 has limitations similar to those treated in the above rejection(s), and are met by the references as discussed claim 12 above.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to CHUONG A. NGO whose telephone number is 571-270-7264. The examiner can normally be reached on Monday 7:00AM to 5:30PM, Tuesday through Thursday 6:00AM to 4:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Abul Azad can be reached on 571-272-7599. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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